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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/758,082

01/16/2004

Chin-Chang Kuo

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TROXELL LAW OFFICE PLLC
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

AMRANY, ADI

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,082

Applicant(s)

KUO, CHIN-CHANG

Examiner

Adi Amrany

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. Page 5, line 2; the correct reference label for the compare amplify circuit is 23.
 - b. Page 5, line 13; the correct reference label for the light emitting diode is 243.
 - c. Page 5, line 16; a 24 should be placed after control circuit.Appropriate correction is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities:
 - d. line 8, it appears that "alternate current" should be recited, "alternating current". This instance recurs several times throughout the claims.
 - e. Line 20; it appears that "with respective to" should be recited, "with respect to". This instance recurs several times throughout the claims.Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2836

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (US 6,611,069).

With respect to claim 1, Wang discloses an intelligent power socket (figure 2; column 1, lines 11-14), comprising:

a base (figure 1, item 1; column 1, lines 32-40), having a casing for covering the top of said base, and said casing at least having a first socket (figure 1, item 12) and a second socket (figure 1, item 12), and said first and second sockets being respectively connected to a power supply (column 1, lines 48-54);

a printed circuit board, being installed at the inner bottom of said base, and further comprising a rectification circuit (figure 3, item 21), and said rectification circuit adjusting an alternate current to a direct current with constant voltage;

a sampling amplify circuit (figures 2, 3, item 41; column 2, lines 56-59), being coupled to said first socket and said rectification circuit, and converting the alternate current entering said first socket into a direct current (figure 3, item 59; column 2, lines 64-67)

a compare amplify circuit (figures 2,3, item 51; column 2, lines 60-63; column 3, lines), being coupled to said sampling amplify circuit, and comparing the voltage of the current outputted from said sampling amplify circuit with the voltage outputted from said rectification circuit, and outputting a potential signal according to the comparison result (column 3, lines 11-33);

a control circuit (figures 2,3, item 61; column 3, lines 1-10, 33-45), being coupled to said compare amplify circuit and second socket, and controlling the ON and OFF states of the power of said second socket with respective to the signal inputted from said compare amplify circuit;

by means of foregoing elements, said compare amplify circuit comparing the voltage outputted from said first socket with a standard voltage, and sending a signal to said control circuit, thereby said control circuit turning the power of said second socket on and off with respective to the on an doff states of said first socket according to said potential signal, and thus not just saving power, but also disconnecting the power of all sockets without switching off the power of each socket manually (column 3, lines 11-54).

It is inherent that intelligent power socket circuitry disclosed in Wang is presented on a printed circuit board. The components shown in figure 3 must be assembled in such a manner as to fit into the base of the power strip shown in figure 1.

With respect to claim 4, Wang discloses the intelligent power socket of claim 1, and further discloses said compare amplify circuit comprises a comparator (figure 3, item 51), and the input end of said comparator is connected to said rectification circuit through said capacitor, resistor, and Zener diode (figure 3, item 55, "+" terminal input of comparator), and another end of said comparator is connected to said sampling amplify circuit (figure 3, "-" terminal input of comparator), and the output end is connected to a resistor in series (figure 3, resistor connected to output point 53), so that said comparator compares the voltage inputted from said sampling amplify circuit with the standard voltage outputted from said rectification circuit (column 3, lines 11-33).

With respect to claim 5, Wang discloses the intelligent power socket of claim 1, and further discloses said control circuit comprises a relay (figure 3, item 65), and said relay is connected with said second socket in series (figure 3; column 3, lines 34-45).

With respect to claim 6, Wang discloses the intelligent power socket of claim 1, and further discloses said control circuit comprises a light emitting diode (figure 3, LED is coupled between points 632 and 652) for indicating the status of the power supply.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2836

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang.

With respect to claim 2, Wang discloses the intelligent power socket of claim 1. Wang does not expressly disclose said rectification circuit comprises a capacitor and a resistor connected in parallel for lowering the voltage of an alternate current, and said capacitor and resistor being coupled to a bridge rectifier, a Zener diode, and a capacitor by an electric circuit, thereby the alternate current after its voltage being reduced by said capacitor and resistor is converted into a pulse direct current of constant voltage by said bridge rectifier, Zener diode, and capacitor, and said pulse direct current is modified into a constant smooth direct current.

Although Wang does not expressly disclose each component recited in claim 2, Wang discloses a rectifier circuit to convert AC power into stable DC power (figures 2,3, item 21; column 2, lines 38-41). Many designs and configurations for rectifier circuits are well known and are commonly in use. It would have been obvious to one having ordinary ^{skill} in the art at the time the invention was made to reconfigure the components of the Wang rectifier with the components recited in claim 2, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

With respect to claim 3, Wang discloses the intelligent power socket of claim 1, and further discloses said sampling amplify circuit comprises a transformer (figure 2,3,

Art Unit: 2836

item 33; column 2, lines 47-55) coupled to said first socket and rectification circuit, and also to a feedback amplify circuit (figure 3, item 41), and the output end of said feedback amplify circuit is connected to a diode (figure 3, item 59), a capacitor (figure 3, capacitor in item 51), and a resistor (figure 3, resistor coupled to item 52) in series, such that when the power of said first socket is connected, the sampling amplify circuit amplifies the power and converts the alternate current into a direct current.

Wang does not expressly disclose a transformer. The sampling amplify circuit (33, 41) disclosed in Wang is coupled to the output of the rectifier (21) via a low-voltage loop (33). Since the sampling amplify circuit is coupled to output of the rectifier, the circuit is only required to convert down a DC voltage level. The transformer recited in claim 3 is necessary because the sampling amplify circuit comprises an AC voltage input that must be converted down before it is rectified into a DC voltage. At the time of the invention by applicant, it would be obvious to a person of ordinary skill in the art to substitute the rectifier coupled to the low voltage loop disclosed in Wang with the transformer coupled to the rectifier recited in claim 2.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

f. Barton (US 6,528,902) and Barton (US 6,759,763) each disclose an intelligent power socket where the second socket is switched on and off

Art Unit: 2836

depending on the signal outputted by a current sensing means coupled to the first socket.

g. Quiros (US 4,659,941) discloses an intelligent power socket comprising a voltage detector that activates the second socket upon detection of voltage across the first socket.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adi Amrany whose telephone number is (571) 272-0415. The examiner can normally be reached on weekdays, from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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